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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/179,156	10/26/1998	HIDEKI WATANABE	FUJS-15.541	5362

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EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT

PAPER NUMBER

2685

DATE MAILED: 08/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/179,156

Applicant(s)  
Hideki Watanbae

Examiner  
Naghme Mehropour

Art Unit  
2685



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 12 6) ☐ Other:

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***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-35**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterzell et al. (US Patent Number 5,722,063) in view of Sevic et al. (US Patent Number 6,069,525).

Regarding **Claims 1-3, 17, 34-35**, Peterzell teaches a radio receiver comprising plural communication system each of which deals with a radio signal having a different power-density spectrum, (See figure 7, numerals 710, 711), plural amplifiers (708, 709), and an control portion 740. The controller is used to control the positions of these switches and monitors the power of **actually** received signal. Peterzell fails to teach that the control portion select an amplifier to be used according to the communication system of the received signal. However Sevic teaches an amplifier circuit comprising: plural amplifiers 104a-104n, a selection control portion 102 to select an amplifier to be used according to the radio communication system mode the radio receiving system further comprising a **control unit** 100 which selects, based on a radio signal **that has been actually** received, a radio communication mode from the plural types of radio communication modes, and **uses** an amplifier corresponding to the **usable** radio communication mode from the plural types of amplifiers, of the received signal (See figure 1 numerals 104a-104n,

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102, Column 5 lines 37-44). Since Sevic and Peterzell teach circuit that have control unit that selects different equipment based on the circuit need. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to above teaching of Sevic to Peterzell, it order to enable the user to select any of the dual system that she desires.

Regarding **Claims 4, 21, 31**, Peterzell teach a radio receiver wherein the output selection portion is entered to the down converter IF mixer (705) (Column 6 lines 34-42). The amplifiers are each constructed as one adapted for intermediate frequency (IF) band which amplifies the radio signal of the IF band (See figure 7 numerals 708, 710, 709, 711).

Regarding **Claims 5, 8,10-11,14, 16, 18-19, 23, 25, 28, 30, 33**, Peterzell teaches a radio receiver wherein the plural types of the radio communication system comprises a first communication system and a second communication system whose permissible noise signal levels differs from each other, the noise signal being caused to the received signal of itself due to that of the other radio communication systems which differs from the former (Column 3 lines 25-31). Peterzell fails to teach that the amplifiers being each set with a different bias current amount so as to each achieve an operating condition meeting the permissible noise signal level, and the bias current amount of the first amplifier is set greater than of the second amplifier. However Sevic teaches the amplifiers being each set with a different bias current amount so as to each achieve an operating condition meeting the permissible noise signal level, and the bias current amount of the first amplifier is set greater than of the second amplifier (See figures 2, 3, Column 5 lines 7-12, lines 37-42) . In Figure 3, Curve 302a is for FM system and 302b for CDMA system, curve 302a

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shows less current than curve 302B. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to provide above teaching of Sevic to Peterzell, in, order to provide a system which works with different noise level.

Regarding **Claims 6, 12, 20, 26**, Peterzell teaches a radio receiver comprising plural communication systems. Peterzell detecting circuit fails to show that whether the first or second communication system will be used, wherein if the first communication system is detected the output of the distributing switch is switched to the first amplifiers, and if the second communication system is detected the output of the distributing switch is switched to the second amplifier side. However Sevic control circuit 102 is capable to detect that whether the first or second communication system will be used, wherein if the first communication system is detected the output of the distributing switch is switched to the first amplifiers, and if the second communication system is detected the output of the distributing switch is switched to the second amplifier, the control circuit determine whether a dual mode CDMA/AMPS mode of operation should be used (Column 4 lines 39-44, Column 6 lines 43-58). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to provide above teaching of Sevic to Peterzell, in order to provide a good quality dual system.

Regarding **Claims 7, 9, 13, 15, 22, 24, 27, 21, 32**, Peterzell teaches a radio receiver comprising plural communication systems, wherein the second communication system is an analog radio AMP communication system and the first communication system is digital CDMA (Column 5 lines 65-68, Column 6 lines 1-5).

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***Response to Arguments***

3. Applicant's arguments filed on 07/09/02 have been fully considered but they are not persuasive.

In response to the Applicant's argument that *Examiner seems to be incorrect on indicating that Peterzell et al. Does not disclose that the mode select signal is generated based on a radio signal that has been actually received.*

Examiner responses that Peterzell teaches a mode select signal generated based on the radio signal that has been actually received is input to a low noise amplifier (703) that is coupled between two switches (701 and 702). One switch (701) couples the LNA (703) to the duplexer (720) and the second switch (702) couples the LNA (703) to a band-pass filter (704). The LNA is coupled to one pole of each switch such that when both switches are switched to those poles, the radio signal that has been actually received is coupled to the LNA and the amplified signal from the LNA is output to the band-pass filter (704). The band-pass filter has a frequency band of 869-894 MHZ. Alternate embodiments are different bands depending on the frequencies of the signals being that has been actually received. A bypass path (730) is coupled to the to the pole of each switch. When the switches are switched to their other poles, the received signal from the duplexer bypasses the LNA and is conducted directly to the band-pass filter(See figure 7, Column 6 lines 36-67, Column 7 lines 1-55). Sevic Control circuits 102 varies the voltage,  $V_c$  which is input to the each amplifier stage select 104a-104n in response to a mode select signal (see figure 1).

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Peterzell mode select signal, for example, may be a logic indicating whether a dual-mode CDMA/AMPS wireless communication device employing the CDMA mode of operation or AMPS mode of operation (See figure 7, col 6 lines 36-67, col 7 lines 1-26).

*Conclusion*

**4. Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 308--6296, (for formal communications indented for entry)

**Or:**

(703) 308-6306, (for informal or draft communications, please label

“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park II. 2121 Crystal Drive, Arlington. Va., sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Melody Mehrpour whose telephone number is (703) 308-7159. The examiner can normally be reached on Monday through Thursday (first week of bi-week) and Monday through Friday (second week of bi-week) from 6:30 a.m. to 5:00 p.m.


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NM

Aug 6, 2002

  
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